

CLAIMS

1. Pressure-sensitive adhesive film suitable for protecting motor vehicle bodies, characterized in that  
5 it is obtained by coating a support layer with a mixture containing:

- 100 parts by weight of an aqueous acrylic dispersion obtained by emulsion polymerization of a monomer mixture comprising 40 to 70% by weight of 2-ethylhexyl acrylate, 20 to 40% by weight of ethyl acrylate, 5 to 15% by weight of vinyl acetate, 0 to 8% by weight of styrene and 2 to 5% by weight of one or more monomers carrying at least one carboxylic group;
- 0.05 to 30 parts by weight, preferably 0.1 to 15.5 parts by weight, of a crosslinking system that can be incorporated in aqueous phase; and
- 0 to 5 parts by weight of one or more anti-ageing agents.

20 2. Adhesive film according to Claim 1, in which the monomer carrying at least one carboxylic group is chosen from acrylic acid, methacrylic acid, itaconic acid, citraconic acid, fumaric acid, maleic acid and derivatives of these acids.

25 3. Adhesive film according to either of Claims 1 and 2, in which the mean particle size of the aqueous acrylic dispersion is less than 500 nm, preferably less than 200 nm.

30 4. Adhesive film according to one of Claims 1 to 3, in which the aforementioned crosslinking system consists of one or more crosslinking agents chosen from crosslinkers of the aliphatic or alicyclic isocyanate type, crosslinkers of the aziridine type, crosslinkers of the carbodiimide type and crosslinkers of the epoxy type.

5. Adhesive film according to one of Claims 1 to 4,

in which the aforementioned crosslinking system consists of:

- either an isocyanate used in an amount of 0.5 to 30 parts by weight, preferably 1 to 15 parts by weight;

5 - or an aziridine used in an amount of 0.05 to 3 parts by weight, preferably 0.1 to 1.5 parts by weight;

- or a carbodiimide used in an amount of 0.1 to 30 parts by weight, preferably 0.1 to 15 parts by weight;

10 - or an epoxy used in an amount of 0.1 to 6 parts by weight, preferably 0.2 to 3 parts by weight;

- or a mixture of an aziridine used in an amount of 0.05 to 0.5 parts by weight and of an isocyanate used in an amount of 1 to 15 parts by weight.

15 6. Adhesive film according to one of Claims 1 to 5, in which the support layer is a monolayer or a multilayer, preferably a trilayer.

20 7. Adhesive film according to one of Claims 1 to 6, in which the support layer comprises a radical polyethylene, a copolymer of ethylene and a C<sub>3</sub>-C<sub>8</sub> olefinic monomer, a polypropylene, an ethylene-propylene copolymer, or a blend of these compounds.

25 8. Adhesive film according to one of Claims 1 to 7, in which the support layer further includes one or more polyolefins intended to increase the bonding of the adhesive layer and the support layer, the said polyolefin(s) being chosen in particular from 30 ethylene/vinyl acetate copolymers and ethylene/acrylic derivative copolymers.

35 9. Use of an adhesive film as defined in one of Claims 1 to 8 for the protection of motor vehicle bodies.

10. Process for manufacturing a pressure-sensitive adhesive film suitable for protecting motor vehicle bodies, characterized in that it comprises the coating

of a support layer with a mixture containing:

- 100 parts by weight of an aqueous acrylic dispersion obtained by emulsion polymerization of a monomer mixture comprising 40 to 70% by weight of 2-ethylhexyl acrylate, 20 to 40% by weight of ethyl acrylate, 5 to 15% by weight of vinyl acetate, 0 to 8% by weight of styrene and 2 to 5% by weight of one or more monomers carrying at least one carboxylic group;
- 0.05 to 30 parts by weight, preferably 0.1 to 15.5 parts by weight, of a crosslinking system that can be incorporated in aqueous phase; and
- 0 to 5 parts by weight of one or more anti-ageing agents

under conditions allowing a coated adhesive layer to be obtained having a thickness of between 5 and 30 microns and a residual moisture content of between 0.001 and 1% by weight.

11. Process according to Claim 10, characterized in that the drying step during the coating process is carried out at a temperature of between 50 and 95°C for a time of between 1 and 30 seconds.